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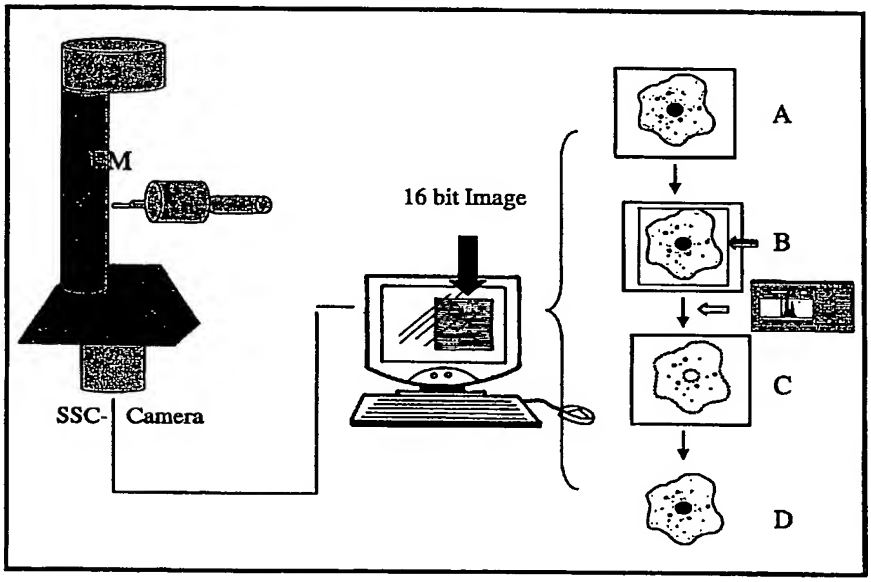
(54) Title: METHOD AND APPARATUS FOR MULTIPLE LABELING DETECTION AND EVALUAT ION OF A PLURALITY OF PARTICLES



(57) Abstract: The invention relates to a transmission electron microscope equipped with a 2k x 2k pixel area Slow Scan Cooled Charge Coupled Device Camera connected to an image processing software for generating an image of a sample. A segmentation of gold particles in the sample is achieved by the separation from specimen structure and background noise. An identification and classification of particle types is carried out according to the shape and size of the detected particles or particle pairs and finally, the gold particle distribution is visualized by the generation of false color overlay images as well as the indication of the numbers in the image.

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